# Before the **Federal Communications Commission** Washington, DC 20554

In the Matter of	)	
	)	IB Docket No. 11-109
	)	
Ligado's Modification Applications	)	
	)	
	)	

### COMMENTS OF PUBLIC KNOWLEDGE AND X-LAB

Public Knowledge and X-Lab (collectively "PK") file these comments in support of Ligado's license modification request and urges the Commission to grant Ligado's latest application. More than two years have passed since Ligado filed its initial amendments and, as the docket numbers attest, nearly seven years have passed since Ligado first began the torturous process of trying to comply with the interference protection demands of neighboring services. The Commission owes Ligado either a grant of its request or a denial that it can appeal to court. This endless process of application modification for new wireless services discourages investment and innovation and is contrary to the spirit, if not the letter, of Section 7 of the Communications Act.<sup>1</sup>

#### ARGUMENT

Ligado's efforts to use its licensed spectrum for a terrestrial network began well before the existing docket. Ligado's predecessor in interest, Lightsquared, initially attempted to build a terrestrial network using its ancillary terrestrial component in 2010. Subsequent interference problems with existing GPS receivers caused the FCC to suspend Lightsquared's ATC license, sending the company into bankruptcy. In 2015, the company emerged from bankruptcy as

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<sup>&</sup>lt;sup>1</sup>47 U.S.C. §157.

Ligado, and began negotiations with stakeholders to find suitable modifications to permit some form of terrestrial operation. In the beginning of 2016, Ligado filed a proposed license modification and request for an auction of additional federal spectrum to provide sufficient spectrum to offer service as an IOT network. On May 23, 2016, Public Knowledge filed comments in support of Ligado's proposed modifications.<sup>2</sup>

For two years, Ligado has continued to shadow box with various stakeholders, seeking in vain for some statement from the Commission as to what it will take to bring this proceeding to resolution. On May 31, 2018, Ligado submitted an additional request for modification further lowering its proposed power levels and offering new reporting and monitoring obligations. On June 8, 2018, the Commission issued a public notice seeking comment on the proposed license applications.

#### I. THE COMMISSION SHOULD GRANT THE MODIFIED APPLICATION.

Since PK filed its initial comments in support of Ligado's application, the case for an IOT only network has become clearer and more compelling. The release by 3GPP of Release 15, touted as the first standalone "5G" network standard, means that equipment for terrestrial IOT networks will soon become broadly available. The increased commercial interest in autonomous vehicles creates an emerging market for a national IOT network independent of other cellular services. Grant of Ligado's application (and scheduling of the subsequent auction) would allow

<sup>&</sup>lt;sup>2</sup> Comments of Public Knowledge, New America's Open Technology Institute, and Common Cause, IB Docket Nos. 11-109, 12-340 (filed May 23, 2016). Available at: https://ecfsapi.fcc.gov/file/60002014483.pdf

<sup>&</sup>lt;sup>3</sup> See Chaim Gartenberg, "The 5G Standard Is Finally Finished With New Standalone Specifications," The Verge (June 15, 2018). Available at: https://www.theverge.com/2018/6/15/17467734/5g-nr-standard-3gpp-standalone-finished

Ligado to develop this network in time to meet this demand, compete with existing mobile networks in the IOT market, and stimulate broader deployment of Release 15.

Ligado has taken extraordinary steps to address interference concerns from potentially impacted stakeholders. As Ligado observed in its license modification, it has now reduced its permitted power output to a mere 10-watts. At this point, the burden should fall on any remaining objecting parties to demonstrate that the proposed service as modified would create harmful interference with any protected system.

## II. THE COMMISSION SHOULD MOVE EXPEDITIOUSLY TO RESOLVE THE PENDING APPLICATION.

No one denies that spectrum proceedings require complicated balancing among existing stakeholders and potential new entrants. At some point, however, enough is enough. The history of the Commission is filled with would-be wireless providers that have spent years languishing in spectrum limbo, waiting for the Commission to provide either a definitive answer or clear guidelines for testing. As Public Knowledge has repeatedly and previously observed, this uncertainty has significant negative impacts on innovation and investment in wireless.<sup>4</sup>

Ligado has worked diligently to address the concerns of stakeholders. As a consequence, numerous parties have dropped their opposition to authorizing Ligado to operate its proposed terrestrial network. The Commission should recognize that complete unanimity among stakeholders will always be impossible, and should make its own evaluation based on the engineering evidence before it and its own experiments and analysis. If the Commission finds that grant of the application will not cause harmful interference to stakeholders, and that the proposed interference mitigation measures provide sufficient reassurance to the Commission,

<sup>&</sup>lt;sup>4</sup> See, e.g., Letter of Harold Feld to Marlene Dortch, March 14, 2016, IB Docket No. 13-213.

then the Commission should grant the application rather than continue to try to find "consensus" among stakeholders. Alternatively, if the Commission cannot at this time determine that grant of Ligado's application would adequately protect existing spectrum users, then the Commission should reject Ligado's application.

In any case, the Commission should either grant the pending application or provide some sort of timetable for its decision. Would be providers of wireless services deserve a clear and fair process. Investors need to know how long capital may be potentially tied up in the approval process, or what testing may be required. Continued delay disserves the public and the public interest.

#### **CONCLUSION**

Ligado has sought to meet every reasonable interference-based objection. It deserves a straight up and down vote on its ending application. Because grant of the Application as modified would provide new services without creating harmful interference to existing users, the Commission should grant the application as modified.

/X/ Harold Feld

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